



Please type or plus sign (+) inside this box → +

OCT 24 2005

Substitute for form 1449A/PTO

PTO/SB/08a (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

OCT 24 2005

**SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
A	A1	US-3,960,619	6/1/1976	Seiter	
	A2	US-4,262,631	4/21/1981	Kubacki	
	A3	US-4,532,150	7/30/1985	Endo, et al.	
	A4	US-4,634,601	1/6/1987	Hamakawa, et al.	
	A5	US-4,759,947	7/26/1988	Ishihara, et al.	
	A6	US-4,822,697	4/18/1989	Haluska, et al.	
	A7	US-4,885,220	12/5/1989	Kuhman, et al.	
	A8	US-4,894,352	1/16/1990	Lane, et al.	
	A9	US-5,000,819	3/19/1991	Pedder, et al.	
	A10	US-5,082,695	1/21/1992	Yamada, et al.	
	A11	US-5,103,285	4/7/1992	Furumura, et al.	
	A12	US-5,232,871	8/3/1993	Ho	
	A13	US-5,238,866	8/24/1993	Bolz, et al.	
	A14	US-5,300,951	4/5/1994	Yamazaki	
	A15	US-5,314,724	5/24/1994	Tsukune, et al.	
	A16	US-5,362,526	11/8/1994	Wang, et al.	
	A17	US-5,409,543	4/25/1995	Panitz, et al.	
	A18	US-5,423,941	6/13/1995	Komura, et al.	
	A19	US-5,427,621	6/27/1995	Gupta	
	A20	US-5,451,263	9/19/1995	Linn, et al.	
	A21	US-5,465,680	11/14/1995	Loboda	
	A22	US-5,508,067	4/16/1996	Sato, et al.	
	A23	US-5,525,550	6/11/1996	Kato	
	A24	US-5,554,570	9/10/1996	Maeda, et al.	
	A25	US-5,591,494	1/7/1997	Sato, et al.	
	A26	US-5,591,566	1/7/1997	Ogawa	
	A27	US-5,593,741	1/14/1997	Ikeda	
m	A28	US-5,597,566	1/28/1997	Hufs	

Examiner

Quoc Dinh Hoang

Date Considered

11/20/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449A/PTO

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2

of 6

Application Number	10/718,887
Filing Date	November 21, 2003
First Named Inventor	Xu, et al.
Group Art Unit	2818
Examiner Name	Quoc Dinh Hoang
Attorney Docket Number	APPM/005620.C1/DSM/LOW K/JW

Submission Date

October 21, 2005

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (* known)			
ky	A29	US-5,618,619	4/8/1997	Petr michl, et al.	
	A30	US-5,627,105	5/6/1997	Delfino, et al.	
	A31	US-5,660,682	8/26/1997	Zhao, et al.	
	A32	US-5,679,413	10/21/1997	Petr michl, et al.	
	A33	US-5,711,987	1/27/1998	Bearinger, et al.	
	A34	US-5,726,097	3/10/1998	Yanagida	
	A35	US-5,741,626	4/21/1998	Jain, et al.	
	A36	US-5,780,163	7/14/1998	Camilletti, et al.	
	A37	US-5,801,098	9/1/1998	Fiordalice, et al.	
	A38	US-5,818,071	10/6/1998	Loboda, et al.	
	A39	US-5,821,168	10/13/1998	Jain	
	A40	US-5,926,437	7/20/1999	Forbes, et al.	
	A41	US-5,926,740	7/20/1999	Forbes, et al.	
	A42	US-5,953,627	9/14/1999	Carter, et al.	
	A43	US-5,989,998	11/23/1999	Sugahara, et al.	
	A44	US-5,998,100	12/7/1999	Azuma, et al.	
	A45	US-6,041,734	3/28/2000	Raoux, et al.	
	A46	US-6,046,758	4/4/2000	Brown, et al.	
	A47	US-6,051,321	4/18/2000	Lee, et al.	
	A48	US-6,054,379	4/25/2000	Yau, et al.	
	A49	US-6,060,132	5/9/2000	Lee	
	A50	US-6,068,884	5/30/2000	Rose, et al.	
	A51	US-6,103,456	8/15/2000	Tobben, et al.	
	A52	US-6,107,192	8/22/2000	Subrahmanyam, et al.	
	A53	US-6,114,259	9/5/2000	Sukharev, et al.	
	A54	US-6,140,226	10/31/2000	Grill, et al.	
hs	A55	US-6,147,009	11/14/2000	Grill, et al.	
hs	A56	US-6,159,871	12/12/2000	Loboda, et al.	

Examiner

Quoc Hoang

Date Considered

11/2005

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 601.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449A/PTO

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

3 of 6

Application Number	10/718,887
Filing Date	November 21, 2003
First Named Inventor	Xu, et al.
Group Art Unit	2818
Examiner Name	Quoc Dinh Hoang
Attorney Docket Number	APPM/005620.C1/DSM/LOW KJW

Submission Date

October 21, 2005

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
by	A57	US-6,287,990	9/11/2001	Cheung, et al.	
	A58	US-6,303,523	10/16/2001	Cheung, et al.	
	A59	US-6,312,793	11/6/2001	Grill, et al.	
	A60	US-6,316,167	11/13/2001	Angelopoulos, et al.	
	A61	US-6,340,628	1/22/2002	Van Cleemput, et al.	
	A62	US-6,364,954	4/2/2002	Urmotoy et al.	
	A63	US-6,372,661	4/15/2002	Lin, et al.	
	A64	US-6,410,437	6/25/2002	Flanner, et al.	
	A65	US-6,417,092	7/9/2002	Jain	
	A66	US-6,429,121	8/6/2002	Hopper, et al.	
	A67	US-6,436,824	8/20/2002	Chooi, et al.	
	A68	US-6,444,568	9/3/2002	Sundararajan, et al	
	A69	US-6,462,371	10/8/2002	Weimer, et al.	
	A70	US-6,465,366	10/15/2002	Nemani et al.	
	A71	US-6,489,238	12/3/2002	Tsui	
	A72	US-6,495,448	12/17/2002	Lee	
	A73	US-6,528,423	3/4/2003	Cataby, et al.	
	A74	US-6,528,426	3/4/2003	Olsen, et al.	
	A75	US-6,531,398	3/11/2003	Gaillard et al.	
	A76	US-6,534,397	3/18/2003	Okada, et al.	
	A77	US-6,537,733	3/25/2003	Campana et al.	
	A78	US-6,555,476	4/29/2003	Olsen, et al.	
	A79	US-6,593,653	7/15/2003	Sundararajan, et al.	
	A80	US-6,627,532	9/30/2003	Gaillard et al.	
	A81	US-6,630,412	10/7/2003	Shioya, et al.	
	A82	US-6,645,883	11/11/2003	Yamamoto, et al.	
	A83	US-6,756,672	6/29/2004	You, et al.	
by	A84	US-6,784,311	9/21/2004	Huang et al.	

Examiner

Quoc Dinh Hoang

Date Considered

11/2005

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Please type a plus sign (+) inside this box →

PTO/SB/08a (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4

of 6

Application Number 10/718,881

November 21, 2003

File No. 11-10000-1

First Named Inventor

Group Art Unit 2818

Examiner Name Quoc Dinh Hoang

Attorney Docket Number APPM/005620 C1/DSM/LW K/JW

Call 844-84-SAFE

U.S. PATENT DOCUMENTS

Examiner

Chris Huang

Date Considered

4/2005

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449A/PTO

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

5

of

6

Application Number	10/718,887
Filing Date	November 21, 2003
First Named Inventor	Xu, et al.
Group Art Unit	2818
Examiner Name	Quoc Dinh Hoang
Attorney Docket Number	APPM/005620.C1/DSM/LOW K/JW

Submission Date

October 21, 2005

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
Quoc Dinh Hoang	B1	EP 0 725 440	8/7/1996	Loboda, et al.		
	B2	EP 0 771 886	6/7/1997	Loboda		
	B3	EP 0 926 715	6/30/1999	Olsen et al.		
	B4	EP 0 926 724	6/30/1999	Swanson et al.		
	B5	EP 1 050 601	11/8/2000	Xia, et al.		
	B6	JP 06-204191 (English Translation)	7/22/1994	Keiji		X
	B7	JP 10-223758 (English Translation)	8/21/1998	Nobuhisa		X
	B8	JP 61257475 (English Translation)	11/14/1986	Arai		X
	B9	WO 00/19498	4/6/2000	Huang		
	B10	WO 00/19508	4/6/2000	Rathi et al.		
Quoc Dinh Hoang	B11	WO 99/33102	7/1/1999	Somekh		

Examiner

Quoc Dinh Hoang

Date Considered

11-2005

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449A/PTO

Application Number	10/718,887
Filing Date	November 21, 2003
First Named Inventor	Xu, et al.
Group Art Unit	2818
Examiner Name	Quoc Dinh Hoang
Attorney Docket Number	APPM/005620.C1/DSM/LOW KJW

(Use as many sheets as necessary)

Sheet

6

of

6

Submission Date

October 21, 2005

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>dh</i>	C1	DIJKSTRA, ET AL. "Optimization of Anti-Reflection Layers for Deep UV Lithography", Proceedings of SPIE Optical/Laser Microlithography VI, Vol. 1927 1993, pp. 275-286.	
	C2	European Search Report from EP 01116054.6-2119 dated October 30, 2001. (APPM/004686 EP)	
	C3	Huang, "IN SITU DEPOSITION OF A LOW K DIELECTRIC LAYER, BARRIER LAYER, ETCH STOP, AND ANTI-REFLECTIVE COATING FOR DAMASCENE APPLICATION", USSN 09/270,039, Filed March 16, 1999. (AMAT/2966.X3)	
	C4	OGAWA, ET AL. "Novel ARC Optimization Methodology for KrF Excimer Laser Lithography at Low K1 Factor", Proceedings of the SPIE Optical/Laser Microlithography V, Vol. 1674 1992, pp. 362-375.	
<i>dh</i>	C5	SWOPE, ET AL. "Improvement of Adhesion Properties of Fluorinated Silica Glass Films by Nitrous Oxide Plasma Treatment" J. Electrochemical Society 144(7) July 1977, pp. 2259-2564.	
<i>dh</i>	C6	TAKEISHI, ET AL. "Stabilizing Dielectric Constants of Fluorine-Doped SiO ₂ Films by N ₂ O-Plasma Annealing, J. Electrochemical Society 143(1) January 1996, pp. 381-384.	

Examiner

Quoc Dinh Hoang

Date Considered

11/2005

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.